

REMARKS

According to the Office action prosecution is reopened. Applicant elects the option to file a reply under 37 CFR 1.111.

Claims 2-4 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. The Office action says that Claim 2 is unclear because the preemptive mode occurs only after the occurrence of the first mode. The first mode occurs when a slip condition is detected. If there is no slip condition, the Office action indicates that the preemptive mode does not occur and cannot terminate.

The nature of the indefiniteness is unclear to Applicant unless it relates to the contingency expressed in claim 1. Therefore, claim 2 has been amended by changing reference to the sensed slip condition to the future perfect tense, thereby overcoming any indefiniteness regarding entry into the preemptive mode. Claims 2 adds a limitation to the torque transfer assembly of Claim 1. Its preemptive mode terminates after a period shall have elapsed without the occurrence of a sensed slip condition.

Claims 1-3 and 5-8 stand rejected under 35 USC 102(b) as anticipated by Watson et al. (U.S. Patent 6,062,330).

According to the Office action, Watson is cited because it discloses a first mode of operation in which torque is increased to a slower pair of wheels upon occurrence of a sensed slip condition. The Office action cites Watson, column 2, lines 50-59 for this disclosure. The relevance cited section of the '330 patent says that when the speed of one of the front (secondary) drive shafts exceeds the speed of the other drive shaft (the primary) by a predetermined magnitude, clutch current is increased incrementally to increase the clutch engagement and torque transfer to the secondary drive shaft. Thereafter, clutch current is reduced, and clutch capacity is reduced accordingly. The '330 patent discloses merely increasing clutch torque capacity when the slip condition occurs. The effect of increasing clutch torque may be to increase or to

decrease the magnitude of the torque applied to the slower pair of wheels. But Claim 1 defines the present application such that the drive assembly increases torque to a slower pair of wheels after determining that a slip condition is likely to occur. Furthermore, Claim 1 says that the magnitude of torque to the slower pair of wheels is increased with reference to the speed of the vehicle and position of one of an accelerator member or an engine throttle plate. Reference to an accelerator member or engine throttle plate participating in increasing torque to the slower wheels is absent from the '330 patent.

The Office action refers to the '330 patent as disclosing a preemptive mode in which front wheel hubs are locked when the front or secondary wheel is stuck or moving at a very low speed relative to the speed of the rear or primary wheel. But if the front wheel speed is above a set point, a clutch assembly 124 is activated and pauses for one second to allow stabilization of the clutch assembly. Thereafter, locking hubs disengage.

Notice the difference between the stuck wheel condition of the '330 patent and the condition of the claims in which a wheel is not stuck but is turning so freely that it is slipping relative to the another wheel. The cited sections of the '330 patent make no reference to a slip condition but only to a stuck or slowly moving front wheel. The present invention is defined with reference to a slip condition determined with reference to the position of an accelerator member or of an engine throttle plate. But the '330 patent is silent in this respect. For these reasons the claims cannot be rejected on the basis of a reference, such as the '330 patent, which does not disclose the invention defined by the claims of the present application.

Claims 9-12, 14 and 16 stand rejected under 35 USC 102(b) as anticipated by Takasaki et al. (U.S. Patent 5752211).

The Office action refers to column 7, lines 23-28 of the '211 patent for disclosing an increase of torque to a slower pair of wheels upon a sensed slip condition. In fact, the '211 patent says at the cited locations exactly the opposite. There, it says that if the rear wheels begin to slip and the speed difference increases to a magnitude, then a

control system increases the driving torque to the front wheels and decreases the driving torque transmitted to the rear, slipping, faster-turning wheels.


But Claim 9 defines the present application as having a controller that increases torque to the slower pair of wheels. Therefore, the '211 patent cannot be cited as a reference for rejected Claims 9-12, 14 and 16 because it discloses nothing with reference to decreasing torque to the slower pair of wheels.

Claim 4 stands rejected as 35 USC 103(a) as being unpatentable over Watson alone (presumably the '330 patent). As discussed above with respect to the rejection of Claims 1-3 and 5-8, the '330 patent discloses nothing with respect to increasing torque to a slower pair of wheels upon the occurrence of a sensed slip condition. Claim 1 cannot be rejected on the basis of a reference that does not disclose the elements of that claim. Therefore Claim 4, which adds a limitation to claim 1, cannot be rejected on this basis.

Claims 13, 15, and 17 stand rejected under 35 USC 103(a) as being unpatentable over the '211 patent. Claims 13, 15, and 17 depend ultimately from Claim 9. As discussed above, the '211 patent not only does not disclose increasing the magnitude of torque transmitted to a slower pair of wheels, but in fact it discloses the opposite, decreasing torque to the slower wheel. Therefore, Claims 13, 15, and 17, which depend from Claim 9, cannot be rejected on the basis of the '211 patent, which discloses nothing with respect to the elements of the independent claims from which dependent Claims 13, 15, and 17 depend.

Claims 1-9 and 11-17 of this application, as amended, appear now in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,



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